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, PPLICANT: Genentech, Inc.

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DR FILING DATE: 1999-10-05
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APPLICANT: Williams, P. Mickey
APPLICANT: Wood, William, I.
TITLE OF INVENTION: Secreted and Transmembrant
TITLE OF INVENTION: Secreted and Transmembrant
FILE OF INVENTION: Acids Encoding the Same
FILE REFERENCE: 10466-14
CURRENT PAPLICATION NUMBER: US/09/905,125A
CURRENT FILING DATE: 2000-02-22
PRIOR APPLICATION NUMBER: PCT/US00/04414
PRIOR FILING DATE: 1999-07-07
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PRIOR APPLICATION NUMBER: PCT/US99/30095
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Sequence 200, Application US/09905125A

Patent No. 6664376

GENERAL INFORMATION:
APPLICANT: Ashkenazi, Avi
APPLICANT: Botstein, David
APPLICANT: Botstein, David
APPLICANT: Eaton, Dan L.
APPLICANT: Ferrara, Napoleone
APPLICANT: Ferrara, Napoleone
APPLICANT: Fong, Sherman
APPLICANT: Gao, Wei-Qiang
APPLICANT: Goddard, A.
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Botstein, David
Desnoyers, Luc
Eaton, Dan L.
Filvaroff, Ellen
Fong, Sherman
Gao, Wei-Qiang
Gerber, Hanspeter
Gerritsen, Mary E.
Goddard, A.
Goddwski, Paul J.
Gotmaldi, Christopher J.
Hillan, Kenneth, J.
Kljavin, Ivar J.
Kljavin, Ivar J.
Mather, Jennie P.
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Paoni, Nicholas F.
Roy, Margaret Ann
Stewart, Timothy A.
Tumas, Daniel
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R APPLICATION NUMBER: US 60/143,048

R FILING DATE: 1999-07-07

R FILING DATE: 1999-07-26

R FILING DATE: 1999-07-26

R PPLICATION NUMBER: US 60/146,222

R FILING DATE: 1999-07-28

R FILING DATE: 1999-09-08

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R FILING DATE: 1999-09-13

R PPLICATION NUMBER: PCT/US99/21090

R FILING DATE: 1999-09-13

R APPLICATION NUMBER: PCT/US99/21090

R FILING DATE: 1999-09-15

R APPLICATION NUMBER: PCT/US99/21547
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APPLICATION NUMBER: US/09/902,775A
FILING DATE: 2001-07-10
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APPLICATION NUMBER: PCT/US99/23089
FILING DATE: 1999-10-05
APPLICATION NUMBER: PCT/US99/28214
FILING DATE: 1999-11-29
APPLICATION NUMBER: PCT/US99/28313
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APPLICATION NUMBER: PCT/US00/00219
FILING DATE: 2000-01-05
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Grimaldi, Christopher J
Gurney, Austin L.
Hillan, Kenneth, J.
Kljavin, Ivar J.
Mather, Jennie P.
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Paoni, Nicholas F.
Roy, Margaret Ann
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R FILING DATE: 1999-12-02
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TITME DATE: 1999-12-02
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Goddard, A.
, Avi
David
  Botstein, Daviu
Desnoyers, Luc
Teton, Dan L.
                                  Fong, Sherman
Gao, Wei-Qiang
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Tumas, Daniel
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Filvaroff,
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                                               Gerber,
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Sequence 853, Application US/09833381

Patent No. 6672186

GENERAL INFORMATION:
TITLE OF INVENTION: No. 6672186e1 Nucle:
FILE REFERENCE: 5800-119

CURRENT APPLICATION NUMBER: US/09/833,38

CURRENT FILING DATE: 2001-04-11

PRIOR FILING DATE: 2000-02-29

NUMBER OF SEQ ID NOS: 2050

SOFTWARE: FastSEQ for Windows Version 3.
SEQ ID NO 853

LENGTH: 2404

TYPE: DNA

ORGANISM: Homo sapiens
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ZIP: 20005-3934
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/892,880
FILING DATE: HEREWITH
CLASSIFICATION DATA:
APPLICATION NUMBER: 60/021,762
FILING DATE: 15-JUL-1996
ATTORNEY/AGENT INFORMATION:
NAME: STEFFE, ERIC K
REGISTRATION NUMBER: 36,688
REFERENCE/DOCKET NUMBER: 1488.0490001
TELECOMMUNICATION INFORMATION:
TELEFAX: 202-371-2600
TELEFAX: 202-371-2540
TELEFAX: 202-371-2540
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APPLICANT: GENTZ, REINER L.
APPLICANT: DILLON, PATRICK J.
TITLE OF INVENTION: CD44-LIKE P.
NUMBER OF SEQUENCES: 15
CORRESPONDENCE ADDRESS:
ADDRESSEE: STERNF
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10 NEW YORK AVENUE,
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GENERAL INFORMATION:
APPLICANT: NI, JIA
APPLICANT: GENTZ,
APPLICANT: DILLON,
                                                                                                                                                                                                                                   USA
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LOCATION:
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CITY: WA
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Fatent No. 6380362;
GENERAL INFORMATION:
APPLICANT: Watson, James D.
TITLE OF INVENTION: Polynuclectides and methods for their TITLE OF INVENTION: by the polynuclectides and methods for their FILE REFERENCE: 11000.105001;
CURRENT APPLICATION NUMBER: US/09/724,864;
CURRENT FILING DATE: 2000-11-28;
PRIOR APPLICATION NUMBER: U.S. No. 6380362 60/171,678;
PRIOR FILING DATE: 1999-12-23;
NUMBER OF SEQ ID NOS: 72
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SOFTWARE: FastSEQ for Windows Version
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Patent No. 5942417;
GENERAL INFORMATION:
APPLICANT: NI, JIAN;
APPLICANT: GENTZ, REINER L.
APPLICANT: DILLON, PATRICK J.
TITLE OF INVENTION: CD44-LIKE PROTEIN
NUMBER OF SEQUENCES: 15
CORRESPONDENCE ADDRESS:
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       FIN & SUITE
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Pred. No. 1.1e
0; Mismatches
                                                                                                                                                                                                                 APPLICATION NUMBER: 60/021,762
FILING DATE: 15-JUL-1996
ATTORNEY/AGENT INFORMATION:
NAME: STEFFE, ERIC K
REGISTRATION NUMBER: 36,688
REFERENCE/DOCKET NUMBER: 1488.0490001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-371-2600
TELEFAX: 202-371-2540
INFORMATION FOR SEQ ID NO: 11:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PROTEIN
                                                               ZIP: 20005-3934

ZIP: 20005-3934

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Vour NURS CORRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/892,880

FILING DATE: HEREWITH

CLASSIFICATION: 435

PRIOR APPLICATION DATA:
                   NM,
STERNE, KESSLLL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-08-892-880-12

US-08-892-880-12

Sequence 12, Application US/0889288C

Patent No. 5942417

GENERAL INFORMATION:

APPLICANT: NI, JIAN

APPLICANT: GENTZ, REINER L.

APPLICANT: DILLON, PATRICK J.

TITLE OF INVENTION: CD44-LIKE PF

NUMBER OF SEQUENCES: 15
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LENGTH: 339 base pairs
TYPE: nucleic acid
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STRANDEDNESS: SILL
TOPOLOGY: linear
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Best Local Similarity
Matches 334; Conser
                                                           USA
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STREET: 11
CITY: WASF
STATE: DC
                                                        COUNTRY: ZIP: 200
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ENGTH: 241
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                  .L.L.C
                                                                                                                    ZIP: 20005-3934

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.30

CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 296.8; DB 2;
Pred. No. 6.4e-75;
); Mismatches 5;
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US-09-389-681-324/c
; Sequence 324, Application US/09389681A
; Patent No. 6518237
; GENERAL INFORMATION:
; APPLICANT: Yuqui, Jiang
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
. APPLICANT: Xu, Jiangchun
                                                                                                                                                                                                                                                                                     US/08/892,880
                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: 60/021,762
FILING DATE: 15-JUL-1996
ATTORNEY/AGENT INFORMATION:
NAME: STEFFE, ERIC K
                                                                                                                                                                                                                                                                                                                                                                                                                                                               REGISTRATION NUMBER: 36,688
REFERENCE/DOCKET NUMBER: 1488
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-371-2600
            SEE: STERNE, KESSLER, G(
: 1100 NEW YORK AVENUE,
WASHINGTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0;
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98.3%;
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nucleic acid
SDNESS: single
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FORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS
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Best Local Similarity 98.
Matches 298, Conservative
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LIOR APPLICATION DATA:
APPLICATION NUMBER:
CORRESPONDENCE ADDRESS
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               ADDRESSEE:
STREET: 1
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INFORMATION
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TREATMENT CANCER AND
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Pred. No. 1.4e-5
); Mismatches
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US-09-620-405B-324/c
Sequence 324, Application US/09620405B
Patent No. 6528054
GENERAL INFORMATION:
APPLICANT: Jiang, Yuqiu
APPLICANT: Dillon, Davin C.
APPLICANT: Mitcham, Jennifer L.
APPLICANT: Miliam T.
TITLE OF INVENTION: COMPOSITIONS AND METHODS
TITLE OF INVENTION: DIAGNOSIS OF BREAST CANC
FILE REFERENCE: 210121.470C8
CURRENT APPLICATION NUMBER: US/09/620,405B
CURRENT FILING DATE: 2000-07-20
NUMBER OF SEQ ID NOS: 495
SOFTWARE: FastSEQ for Windows Version 3.0
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TITLE OF INVENTION: COMPOSITIONS FOR THE TITLE OF INVENTION: DIAGNOSIS OF BREAST CALFILE REFERENCE: 210121.470C3
CURRENT APPLICATION NUMBER: US/09/389,681A
CURRENT FILING DATE: 1999-09-02
NUMBER OF SEQ ID NOS: 463
SOFTWARE: FastSEQ for Windows Version 3.0
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Matches 239; Conservative
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                              61 ACCTAATCTCTGTAAAGCTAAAATAAAATAGAACAAGGCTGAGGATACGACAGTAC
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CANCER AND
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US-09-604-287A-324/c

i Sequence 324, Application US/09604287A

j Patent No. 6586572

general information:
   APPLICANT: Jiang, Yuqiu

APPLICANT: Mitcham, Jennifer L.
APPLICANT: Xu, Jiangchun

APPLICANT: Harlocker, Susan L.
APPLICANT: Hepler, William T.
TITLE OF INVENTION: COMPOSITIONS AND METHODS PRICE OF INVENTION: DIAGNOSIS OF BREAST CANC;
FILE REFERENCE: 210121.470C7

CURRENT FILING DATE: 2000-06-22

NUMBER OF SEQ ID NOS: 489

APPLICANT FASTSEQ for Windows Version 3.0
                                                                                                                                                                                                          Patent No. 6579973;
GENERAL INFORMATION:
APPLICANT: Jiang, Yuqui
APPLICANT: Dillon, Davin C.
APPLICANT: Mitcham, Jennifer L.
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1-09-433-826B-324/c
Sequence 324, Application US/09433826B
Datent No. 6579973
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09-604-287A-324
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APPLICANT: Jiang, Yuqiu
APPLICANT: Dillon, Davin C.
APPLICANT: Mitcham, Jennifer L.
APPLICANT: Mitcham, Jennifer L.
APPLICANT: Harlocker, Susan L.
APPLICANT: Hepler, William T.
APPLICANT: Hepler, William T.
APPLICANT: Henderson, Robert A.
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR TITLE OF INVENTION: DIAGNOSIS OF BREAST CANCER
FILE REFERENCE: 210121.470C9
CURRENT APPLICATION NUMBER: US/09/834,759
CURRENT FILING DATE: 2001-04-13
NUMBER OF SEQ ID NOS: 547
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 324
LENGTH: 241
Score 239; DB 4;
Pred. No. 1.4e-58,
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DEFINITION	Sequence 200 from patent US 6635468.	
ACCESSION	AR410761	
VERSION	AR410761.1 GI:40162261	
KEYWORDS	•	
SOURCE	Unknown.	
ORGANISM	Unknown.	
	Unclassified.	
REFERENCE	O	
AUTHORS	Ashkenazi, A., Botstein, D., Desnoyers, L., Eaton, D.L., Ferrara, N.,	
	Filvaroff, E., Fong, S., Gao, WQ., Gerber, H., Gerritsen, M.E.,	
	Goddard, A., Godowski, P.J., Grimaldi, J.C., Gurney, A.L., Hillan, K.J.,	
	Kljavin, I.J., Mather, J.P., Pan, J., Paoni, N.F., Roy, M.A.,	

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TCTGGACCACGAGGCTCCTGGTCCAAGGCTCTTTGCGTGCA 240
STGTCATGCAGAATTATGGGGATCACCCTTGTGAGCAAAAG 300
CACAGAAGCTAAGGAGGCCTGTAGGCTGCTGGGACTAAGT 360
accaagttgaaacagccttgaaagctagctttgaaacttgcagctat 420
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CTGATTTGGAAGGTTCCAGTGAGCCGACAGTTTGCAGCCTAT 540
TGATACTTGGACTAACTCGTGCATTCCAGAAATTATCACCACCAAA 600
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ACTCTACAATACCTGCCCCTACTACTCCTCCTCCTGCT 720
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Compositions and methods for the diagnosis and treatment of disorders involving angiogenesis

L Patent: WO 0208284-A 31 31-JAN-2002;
Genentech, Inc. (US); Baker, Kevin P. (US); Ferrara, Napoleone (US); Gerber, Hanspeter (US); Gerritsen, Mary E. (US); Goddard, Audrey (US); Godowski, Paul J. (US); Gurney, Austin L. (US); Hillan, Kenneth J. (US); Marsters, Scot A. (US); Pan, James (US); Paoni, Nicholas F. (US); Stephan, Jean-Philippe F. (US); Watanabe, Colin K. (US); Williams, P. Mickey (US); Wood, William I. (US)
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	REFERENCE AUTHORS	Baker, K.P., Ferrara, N., Gerber Godowski, P.J., Gurney, A.L., Hi Paoni, N.F., Stephan, J.P., Wata	.,H., Gerritsen,M.E., Goddard,A., llan,K.J., Marsters,S.A., Pan,J., nabe,C.K., Williams,P.M., Wood,W.I.
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60/059266,15-OCT-1997 U

60/062814,24-OCT-1997 U

60/063120,24-OCT-1997 U

60/063329,27-OCT-1997 U

60/063549,28-OCT-1997 U

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60/064248,07-NOV-1997 U

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60/063329,27-OCT-1997 U
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/mol_type="genomic DNA"
/db_xref="taxon:9606"
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3D173349.1 GI:28414660
SD173349.1 GI:28414660
IP 2002238588-A/165.
Jomo sapiens (human)
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Clark,H.F., Gurney,A.L., Abaya,E., Baker,K., Baldwin,D., Brush,J., Chen,J., Chow,B., Chui,C., Crowley,C., Currell,B., Deuel,B., Dowd,P., Eaton,D., Foster,J., Grimaldi,C., Gu,Q., Hass,P.E., Heldens,S., Huang,A., Kim,H.S., Klimowski,L., Jin,Y., Johnson,S., Lee,J., Lewis,L., Liao,D., Mark,M., Robbie,E., Sanchez,C., Schoenfeld,J., Seshagiri,S., Simmons,L., Singh,J., Smith,V., Stinson,J., Vagts,A., Vandlen,R., Watanabe,C., Wieand,D., Woods,K., Xie,M.H., Yansura,D., Yi,S., Yu,G., Yuan,J., Zhang,M., Zhang,Z., Goddard,A., Wood,W.I. and Godowski,P.

The Secreted Protein Discovery Initiative (SPDI), a Large-Scale Effort to Identify Novel Human Secreted and Transmembrane Proteins: A Bioinformatics Assessment
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/mol_type="mRNA"
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clone DNA34431 XLKD1
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/locus_tag="UNQ230"
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/locus_tag="UNQ230"
/note="PRO263"
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EFIVSDSTYSVASPYSTIPAPTTTPPAPASTSIPRRKKLICVTEVFMETSTMSTETEP
FVENKAAFKNEAAGFGGVPTALLVLALLFFGAAAGLGFCYVKRYVKAFPFTNKNQQKE
MIETKVVKEEKANDSNPNEESKKTDKNPEESKSPSKTTVRCLEAEV"
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Jackson, D.G., Banerji, S. and Ni, J.
Direct Submission
Submitted (06-JAN-1999) MRC Human Immunol
John Radcliffe Hospital, Headington, Oxfo
Location/Qualifiers
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/organism="Homo sapiens"
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91._.1059
/note="CD44-like cell surface hy.
of LINK Superfamily; HUVEC"
/codon_start=1
/product="lymphatic endothelium-
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Banerji, S., Ni, J., Wang, S.X., C.
and Jackson, D.G.
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Generation and initial analysis of more than 15,000 full-length
human and mouse cDNA sequences
Proc. Natl. Acad. Sci. U.S.A. 99 (26), 16899-16903 (2002)
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Series: IRAL Plate: 37 Row: c Column: 20
This clone was selected for full length sequencing because it passed the following selection criteria: matched mRNA gi: 5729910.
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Catarrhini; Hominidae; Homo.
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Submitted (02-APR-2002) National Institutes of Health, Mammalian Submitted (02-APR-2002), Cancer Genomics Office, National Cancer Gene Collection (MGC), Cancer Room 11A03, Bethesda, MD 20892-2590, The fitute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
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DNA Sequencing by: Sequencing Group at the Stanford Human
Center, Stanford University School of Medicine, Stanford,
Web site:
    http://www-shgc.stanford.edu
Contact: (Dickson, Mark) mcd@paxil.stanford.edu
Dickson, M., Schmutz, J., Grimwood, J., Rodriquez, A., and
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Homo sapiens extracellular link
clone MGC:22159 IMAGE:4712863),
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Contact: MGC help desk
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chronic mucosal lesions (e.g. enterocolitis, Zollinger-Ellison syndrome, gastrointestinal ulceration and congenital microvillus atrophy), skin diseases associated with abnormal keratinocyte differentiation (e.g. psoriasis, epithelial cancers such as lung squamous cell carcinoma of the vulva and gliomas), potent effects on cell growth and development, diseases related to growth or survival of nerve cells including PRO265 can be used as for fibromodulin, e.g. for reducing dermal scarring. PRO264 can be used as a target for anti-tumor drugs. PRO533 may be used in the treatment of Usher Syndrome or Atrophia areata; PRO269 can be used as an anti-thrombotic agent; PRO287 polypeptides and portions may have therapeutic applications in wound healing and tissue repair; PRO317 can be used for treating problems of the kidney, uterus, endometrium, can be used for treating problems of the kidney, uterus, endometrium, can be used so are alted tissue, e.g. in the heart of genital tract
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psoriatic; antiparkinsonian; ptaxic; angiogenic; ciarthritic; antirheumatic; cerebroprotective; ; Zollinger-Ellison syndrome; er; Parkinson's disease; y; wound healing; rmation; angiogenesis; psis; inflammatory disorder; premature aging; AIDS; promature aging; AIDS; 1920 2220 1920 2160 2340 1980 1980 2040 2040 2100 2100 2160 2220 2280 2280 2340 GTGCTGTGCAAGGTATTACACTC TAGAACGCTATCTGGGAAGCTAT AAACTAATTTTTATTTTGCTGA TATAACCTTAATTTATTAATAAC WI; Wood ď

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                                                                                      The polypeptides and polynucleotides of the invention may be useful as research tools and as therapeutics for treating enterocolitis, Zollinger Ellison syndrome, gastrointestinal ulceration, psoriasis, cancer, Parkinson's disease, Alzheimer's disease, ALS, neuropathies, dermal scarring and wound healing, nerve repair, thrombosis, bone and/or cartilage formation, angiogenesis, asthma, rheumatoid arthritis, multiple sclerosis, inflammatory disorders, atherosclerosis, cardiac injury, infertility, premature aging, AIDS, diabetes complications and stroke. The molecules may also be utilised during gene therapy procedures and transgenic animal production. The current sequence is that of the human
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cardiant;
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Kljavin IJ;
Tumas D;
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ਨੋ ਨੇ שׁ transmembrane PRO polypeptide useful for ivity of a cell, or for treating sports-relate ritis or rheumatoid arthritis. Godowski PJ Goddard A, Wood WI; Gerritsen ME, Watanabe CK, Watanabe ogical activity of osteoarthritis or

The invention relates to an isolated secreted and transmembrane PRO Dolypeptide having 80 % sequence identity to a sequence appearing as ABG9581-ABG95934 or their associated signal peptide. Or a sequence of an extracellular domain of the proteins with their associated signal peptide. Or a sequence of an extracellular domain of the proteins with their associated signal peptide. Also included are the nucleic acids encoding the proteins, vectors, host cells, fusion proteins and antibodies which specifically bind to the proteins. The proteins and antibodies which specifically bind to the proteins. The proteins and determining an A. B. C or D polypeptide, by contacting the sample with a polypeptide designated as B. F. G. H or I (or vice versa) and determining the formation of a A/B. B.F. B/G. CH or D/I polypeptide conjugate in the sample, where the formation of the conjugate is indicative of the presence of an A. B. C or D polypeptide, D/I polypeptide is indicative of the presence of an A. B. C or D polypeptide. C is a PRO1037D polypeptide. E is a PRO300040 polypeptide, D/I polypeptide, D/I sa PRO1037D polypeptide. E is a PRO30040 polypeptide. The E. F. G. C or D polypeptide. The proteins are useful for linking a bioactive molecule expressing a polypeptide designated as A. B. C or D or B. F. G. H or I. The proteins are useful for modulating a biological coling support. The bioactive molecule causes death of the cell. A. B. C, D. E. F. G. H. Or I. or antibodies against them are useful for modulating a biological cativity of a cell expressing a polypeptide designated as A. B. C or D or E. F. G. H. Or I. or antibodies against them are useful for modulating a biological cativity of a cell expressing a polypeptide designated as A. B. C or D or E. F. G. H. Or I. The cell is killed. The proteins are useful for modulating a biological cativity of a cell expressing a polypeptide designated as A. B. C or D or E. F. G. H. Or I. The cell is killed. The protein expressing a polypeptide designated as A. B. C or D or E. F. G. H. O an de 0 0 0 0 0 0 or Ø ϋ Φ

780 40 900 300 00 360 420 540 099 οĘ 0 0 240 0 0 0 540 009 0 0 0 0 24 42 72 72 78 0 ∞ vurification The present of the Q TTCCACTTCTATTCCACGGAGAAAAAATTGATTTGTGTCACAGAAGTTTTATG GAAACTAGCACCATGTCTACAGAAACTGAACCATTTGTTGAAAATAAAGCAGCATTCAAG CAGT GTGAGCAAAAAG Gaps of anti-sense RNA and DNA, for the preparation of the proteins, t generate transgenic or knockout animals which are useful in the development and screening of therapeutic useful reagents, for chidentification, and in gene therapy. The antibody is useful as a therapeutic agent, in a diagnostic assay and for affinity purific the protein from recombinant cell culture natural sources. The prequence encodes a novel secreted or transmembrane protein of the invention ; 0 TGCAGAATTATGGGGATCACCCTTGTGAG 2372 Other Length Indel 0 ü; 9 0; 0 ï. DB 638 re 2372; 1. No. 0; Ismatches ö Score Pred. σ 48 rccaggrgrcai ||||||||||| rccaggrgrcai \ddot{c} • • 0 100.0%; 7 100.0%; cvative 0 524 A; CCAT CAT 721 CCAGCTTCCAC Match Local Similarity es 2372; Conser ВР 2 237 Sequence ન 61 61 21 181 241 241 301 301 361 361 421 421 481 481 541 541 601 601 661 661 721 721 781 781 841 121 81 uery sest L atche du Dp g dd g d g g D ð g ð ð ð ð Q ð ð ਠੋ ਠੋ

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ID NO:31 nce SEQ rdiant; cytostatic; antiangiogenic; hypotensive; clerotic; PRO agonist; PRO antagonist; trauma; cular disorder; endothelial disorder; cancer; rdiac hypertrophy; atherosclerosis; hypertension; eneration; arterial restenosis; angina; lyocardial infarction; thrombophlebitis; mayoration; thrombophlebitis; mayoration; thrombophlebitis; mayoration; sene mapping; gene; ss.

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ABL88072 to ABL88258 encode the PRO proteins given in ABB84817 to ABB85003. The PRO proteins and polynucleotides have cardiant, cytostatic, antiangiogenic, hypotensive, vulnerary and antiarteriosclerotic activities, and can be used in gene therapy. The PRO polynucleotides, cortivities, and antagonists are useful for treating or diagnosing a cardiovascular, endothelial or angiogenic disorder in a mammal, e.g. cardiac hypertrophy, trauma, cancer, age-related macular degeneration, atherosclerosis, hypertension, arterial restenosis, rheumatoid arthritis, angina, myocardial infarctions, thrombophlebitis, lymphangitis, tumour cangiogenesis (such as breast carcinoma and liver carcinoma) and wound the aling. The PRO polynucleotides have applications in molecular biology, including use as hybridisation probes, and in chromosome and gene mapping. ABL88259 to ABL88267 represent primers and probes used in the exemplification of the present invention
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                                                                                             The present invention provides the protein and coding sequences of human PRO proteins. These are useful for treating or diagnosing a cardiovascular, endothelial or angiogenic disorder, including cardiac hypertrophy, trauma, cancer, age-related macular degeneration, atherosclerosis, hypertension, arterial restenosis, rheumatoid arthritiangina, myocardial infarctions, thrombophlebitis, lymphangitis, tumour angiogenesis (such as breast carcinoma and liver carcinoma) and wound healing. The present sequence is a coding sequence of the invention
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The invention relates to human PRO polypeptides (secreted or transmembrane polypeptides) and the polynucleotides encoding them. The PRO polypeptides and polynucleotides can be used in treating pathological disorders and tumours, in therapeutic treatment of cardiac insufficiency disorders and in therapeutic treatment of disorders involving protein secretion by the pancreas, including diabetes. They can also be used in treating disorders associated with the preservation and maintenance of gastrointestinal mucosa and the repair of acute and chronic mucosal lesions, and skin diseases associated with abnormal keratinocyte differentiation (e.g., psoriases, epithelial cancers such as lung squamous cell carcinoma, epidermoid carcinoma of the vulva and gliomas). The sequences can be used as molecular markers for protein celectrophoresis purposes and can be utilised in protein-protein binding assays, biochemical screening assays, immunoassays and cell-based assays. This sequence represents a human PRO polynucleotide of the invention
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The present invention relates to the isolation of novel human secreted and transmembrane proteins (PRO polypeptides), and the polynucleotide sequences are useful in sequences encoding them. The polynucleotide sequences are useful in molecular biology, as hybridisation probes, in chromosome and gene mapping, in generating antisense RNA and DNA, and in gene therapy. The polynucleotide sequences may also be used in preparing PRO polypeptides or knock-out animals which, in turn, are useful in the development and screening of therapeutically useful reagents. The PRO polypeptides or their antibodies are useful in preparing a medicament for treating a condition responsive to the polypeptide or antibody, such as cancer, animals or statement and in various diagnostic assays. The researt semience encodes a human PRO polypeptide of the invention
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Kljavin IJ;
Tumas D;
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Fong S, Gao W, Gerber I
Grimaldi JC, Gurney AL,
In J, Paoni NF, Roy MA,
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1411	Human cDNA for secreted/transmembrane proteir Human; ss; gene; secreted protein; transmemb gene therapy; chromosome identification; chr	o sapiens.	S20030035	02-JAN-2003. 11-JUL-2001; 2001US-00904011.	7-SEP-1997; 97US-00591] 7-SEP-1997; 97US-00591]	7-SEP-1997; 97US-005911 7-SEP-1997; 97US-005911	7-SEP-1997; 97US-0059121 7-SEP-1997; 97US-0059122	7-SEP-1997; 97US-0059184 8-SEP-1997; 97US-0059263 8-SEP-1997; 97US-0059266	5-OCT-1997; 97US-0062125 7-OCT-1997; 97US-0062285	/-OCT-199/; 9/US-0062287 1-OCT-1997; 97US-0063486 4-OCT-1997; 97US-0062814	4-OCT-1997; 97US-0062816 4-OCT-1997; 97US-0063045 4-OCT-1997; 97US-0063120	4-OCT-1997; 97US-0063121 4-OCT-1997; 97US-0063127	4-OCT-1997; 97US-0063128 7-OCT-1997; 97US-0063327	/-CCI-199/; 9/US-0063529 8-OCT-1997; 97US-0063541 8-OCT-1997; 97US-0063542	8-OCT-1997; 97US-0063544 8-OCT-1997; 97US-0063549	8-OCT-1997; 97US-0063550 8-OCT-1997; 97US-0063564	9-OCT-1997; 97US-0063433 9-OCT-1997; 97US-0063704 9-OCT-1997; 97US-0063732	OCT-1997; 97US- OCT-1997; 97US- OCT-1997; 97US-	9-OCT-1997; 97US-0064215 1-OCT-1997; 97US-0063870	3-NOV-1997; 97US-006410 7-NOV-1997; 97US-006424	2-NOV-1997; 97US-0065186 7-NOV-1997; 97US-0065846 8-NOV-1997: 97US-0065693	L-NOV-1997; 97US-006612 L-NOV-1997; 97US-006636	1-NOV-1997; 97US-0066453 1-NOV-1997; 97US-0066466	1-NOV-1997; 97US-0066770 1-NOV-1997; 97US-0066770 1-NOV-1997; 97US-0066772	0-SEP-1998; 98WO-US01882 1-SEP-1998; 98WO-US01917 1-SEP-1998; 98WO-US01917	-SEP-1998; 98WO-US01943 -DEC-1998; 98WO-US02510	8-SEP-1999; 99WO-US02059 3-SEP-1999; 99WO-US02094	5-SEP-1999; 99WO-USO21 5-SEP-1999; 99WO-USO21 5-OCT-1999; 99WO-USO23	-NOV-1999;
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mbrane protein; PRO; hromosome marker. ein PRO263.

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The invention relates to an isolated nucleic acid with at least 80% nucleic acid sequence identity to a nucleotide sequence encoding one of a secreted/transmembrane polypeptides, or PRO polypeptides or encoding a PRO protein extracellular domain. Also included are a vector comprising the PRO nucleic acid, a host cell comprising the vector, producing a PRO polypeptide (by culturing the host cell for the expression of the PRO polypeptide, and recovering the PRO polypeptide from the following at least 80% sequence identity to: (an isolated PRO polypeptide (having at least 80% sequence identity to: (an isolated PRO polypeptide (having at least 80% sequence identity to: (an imain acid sequence encoded by a nucleic acid molecule deposited with an ATCC number (detailed in the specification); or (c) an extracellular domain of a PRO polypeptide or to a PRO polypeptide lacking its associated signal a PRO polypeptide or to a produce and a national approach and a sample suspected of containing the polypeptide.

DEACLES OF PRO1868 in a sample suspected of containing the polypeptide or to a produce and produce and processing a PRO245 or PRO1868 in modulating at least one biological activity of a cell expressing a PRO245 or PRO1868 in a sample suspected of containing and processing a processing and the acids may be used for recombinantly expressing those markers. The propertice acids may be used for recombinantly expressing those markers. The PRO pulpeptides are useful in diagnostic assays for PRO, and in affinity purification of PRO from recombinant cell culture or natural affinity purification of PRO from recombinant cell cult
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New transmembrane polypeptides and nucleic acids encoding the polypeptides, useful in gene therapy, in chromosome identification, chromosome markers, in generating probes and in tissue typing.
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ME, Goddar
Kljavin IJ;
Tumas D;
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Goddard A;

Gaps 0; Length 2372; 0 Other; Indels 1; ·. DB core 2372; red. No. 0; Mismatches Score Pred. 0; 100.0%; Conservative Similarity Query Match Best Local Sim: Matches 2372; Sequence

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Fong S, Gao W, Gerber H,
Grimaldi JC, Gurney AL,
Pan J, Paoni NF, Roy MA,
Wood WI;
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Ą Ferrara N; ME, Goddard 1 Kljavin IJ; Tumas D; New genes and secreted and transmembrane polypeptides (e.g. PRO245 or PRO335), useful for treating or diagnosing e.g. Alzheimer's disease, cancers, hemorrhage, rheumatoid arthritis, diabetes, cirrhosis, ischemi or strokes.

482pp; English. Claim 2; Fig 73;

ing comprising The invention describes a new isolated nucleic acid molecule comprising the full length coding sequence of the DNA deposited with the American Type Culture Collection (e.g. ATCC Deposit No. 209258), or a sequence with at least 80% identity to a DNA encoding a PRO polypeptide comprisi any of 61 sequences having 164-1119 amino acids fully defined in the specification. The PRO polypeptides or polynucleotides are useful as pharmaceuticals, diagnostics, biosensors or bioreactors. These are

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The invention describes an antibody that specifically binds to a PRO polypeptide having a fully defined amino acid sequence given in the specification. The antibody is useful in identifying PRO polypeptides useful for various industrial applications, including pharmaceuticals, diagnostics, biosensors and bioreactors. The antibody is also used for affinity purification of PRO polypeptides from recombinant cell culture or natural sources. The antibody, PRO polypeptide, or its agonists or antagonists, may be used for preparing a medicament for diagnosing or treating a condition responsive to the antibody, PRO polypeptide, or its agonists or antagonists. This sequence encodes a novel human secreted antransmembrane PRO polypeptide
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The invention describes novel isolated PRO polypeptides. The PRO
polypeptides or anti-PRO antibodies are useful in preparing a medicament
for treating a condition that is responsive to the PRO polypeptide or
antibody. The PRO nucleotide sequences may be used as hybridisation
probes in chromosome and gene mapping, or in generating antisense RNA and
DNA. PRO nucleic acids are also useful in preparing PRO polypeptides, in
assays to identify other proteins or molecules involved in binding
creaction, to generate transgenic animals or knockout animals, which in
turn are useful in the development and screening of therapeutically
useful reagents, for chromosome identification, and tissue typing. The
USE of polypeptides and nucleic acid molecules are also useful in gene
therapy, and as molecular weight markers for protein electrophoresis
purposes. The anti-PRO antibodies may be used in diagnostic assays for
purposes. The affinity purification of PRO from recombinant cell and or preparing the PRO secreted used in diagnostic assays for PRO from recombinant cell encodes a novel human secret human Length 2372; New secreted and transmembrane PRO polypeptides and nucleic molecules encoding the polypeptides, useful in gene therapy a medicament for treating a condition that is responsive to polypeptide or antibody. 0 U; 0 Other; .; ' 524 C; 489 G; 638 T; DB 2372; No. 0; sources. This sequence Score Pred. English. PRO poypeptide 100.0%; 409pp; 2372 BP; 721 A; Similarity Sequence

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2003-147434/14 WPI; 2003-147454 P-PSDB; ABU54382

or New PRO polypeptides and nucleic acid molecules, useful in diagnosing or treating inflammatory diseases, organ failure, atherosclerosis, cardiac injury, infertility, cancer, AIDS, Alzheimer's disease or Parkinson's diseases, organicer, AIDS, injury, disease.

73; 473pp; English Claim 2; Fig The invention relates to an isolated PRO polypeptide having at least 80% amino acid sequence identity to: (a) any one of 61 fully defined amino acid sequences given in the specification (appearing as ABU54347-ABU54407); (b) an amino acid sequence encoded by the nucleotide sequence deposited under American Type Culture Collection (accession numbers listed in the specification); (c) any one of the PRO sequences which lacks its associated signal peptide; (d) an extracellular domain of the PRO polypeptide with its associated signal peptide; or (e) an extracellular domain of the PRO polypeptide which lacks its associated signal peptide. Also include are the nucleic acids encoding the PRO polypeptides, vectors, host cells and anti-PRO antibodies. The PRO polypeptides and nucleic acids are useful in diagnosing or treating enterocolitis, gastrointestinal ulceration, skin diseases associated with abnormal keratinocyte differentiation, e.g. psoriasis or epithelial cancers such as squamous cell carcinoma, Alzheimer's disease, Parkinson's with 80% sednence Parkinson' the

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disease, amyotrophic lateral sclerosis, inflammatory diseases, e.g. rheumatoid arthritis, asthma or multiple sclerosis, organ failure, atherosclerosis, cardiac injury, infertility, birth defects, premature aging, AIDS, cancer, diabetic complications, or mutations in general. The polypeptides are also useful for wound repair and associated therapies concerned with re-growth of tissue. The nucleotide sequences may be used as hybridisation probes in chromosome and gene mapping, or in generating antisense RNA and DNA. PRO nucleic acids are also useful in preparing PRO polypeptides, in assays to identify other proteins or molecules involved in binding reaction, to generate transgenic animals or knockout animals, which in turn are useful in the development and screening of therapeutically useful reagents, for chromosome identification, and tissue typing. The PRO polypeptides and nucleic acid molecules are also useful in gene therapy, and as molecular weight markers for protein electrophoresis purposes. The anti-PRO antibodies may be used in clasmostic assays for PRO, or for the affinity purification of PRO from recombinant cell culture or natural sources. The present sequence encodes PRO polypeptide ಹ

Other; 0 \Box 0 Ħ 638 .. U 489 \ddot{c} 524 A; 721 BP; 2372 Sequence

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                                        /organism="Homo sapiens"
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/db_xref="taxon:9606"
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/note="1st strand cDNA was primed with a NotI-oligo(dT)
primer. Five prime end enriched, double-strand cDNA was digested with Not I and cloned into the Not I and EcoR I sites of the pCMVSPORT 6 vector. Library was normalized.
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                                                                                                                                                                      Score 1053.4; DB 9;
Pred. No. 2.5e-212;
3; Mismatches 20;
http://fulllength.invitrogen.com/
Faraday Avenue Genoscope sequence
Location/Qualifiers
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/db_xref="taxon:9606"
/db_xref="taxon:9606"
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/note="1st strand cDNA was primed with a NotI-oligo(dT)
primer. Five prime end enriched, double-strand cDNA was primer. Five prime condeniched into the Not I and Ecorgingested with Not I and cloned into the Not I and Ecorgines of the pCMVSPORT 6 vector. Library was normalized
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                                                  ACCTGACATGTCCTTCTGAGCCCGGTAAGAGCAAAAGAATGGCAGAAAAGTTTAGCCCCT
                                                                                                                   Genoscope - Centre National de Sequencage
Genoscope - Centre National de Sequencage
BP 191 91006 EVRY cedex - France
Email: seqref@genoscope.cns.fr, Web: www.genoscope.cns.fr
Library was constructed by Life Technologies, a division of
Invitrogen. This sequence belongs to sequence cluster 5952.r ]
more information about this cluster, see
http://www.genoscope.cns.fr/
cgi-bin/cluster.cgi?seq=CS0DI039DE03QP1&cluster=5952.r. Contac
Feng Liang Email: fliang@lifetech.com URL:
http://fulllength.invitrogen.com/ InVitroGen Corporation 1600
Faraday Avenue Genoscope sequence ID: CS0DI039DE03QP1.
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Catarrhini; Hominidae;
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Mammalia; Eutheria; Primates; Catarrhini; Homir
1 (bases 1 to 1154)
Li,W.B., Gruber, C., Jessee, J. and Polayes, D.
Full-length cDNA libraries and normalization
Unpublished (2001)
On Feb 15, 2001 this sequence version replaced
Contact: Genoscope
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Pred. No. 2.7e-210;
4; Mismatches 6;
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AL550279 Homo sapiens PLACENTA COT 25-NORI
clone CS0DI039YJ06 5-PRIME, mRNA sequence
AL550279
AL550279.2 GI:31272096
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Matches 1057; Conservative
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omo sapie INA seque GI:3054 GI:3054 IS (human IS (information about this cluster, information about this cluster, //www.genoscope.cns.fr/ bin/cluster.cgi?seq=CSODEOO7CCO9G Liang Email : fliang@lifetech.cc ://fulllength.invitrogen.com/ Inv day Avenue Genoscope sequence ID Location/Qualifiers 11201 /organism="Homo sapiens" /mol_type="mRNA" /db_xref="taxon:9606" /clone="CSODEOO7YF17" /tissue type="PLACENTA"	lib="Homo saple Vector: pCMVSPO NotI-oligo(dT) strand cDNA was I and ECORV si was not normal .4%; Score 100 .5%; Pred. No.	QY 1260 CTCAGGACTGCCATTGGACTATGGAGTGCACCAAAGAATGCCCTTCTCCTTATTGTAA	1380 TGTCCTAATAATATC 175 TGTCCTAATAATATC 176 CTCATCAGTATCCAG	DD 235 CICATCAGIAICCAGIGGIAAAAGGCCICCIGGCIGICIGAGGCIAGGIGGGITGAAAG QY 1500 CCAAGGAGTCACTGAGACCAAGGCTTTCTCTGATTCCGCAGCTCAGACCCTTTCTTC	Qy 1560 AGCTCTGAAAGAGAAACACGTATCCCACCTGACATGTCCTTCTGAGCCCGGT
Db 64 CTCTCATATCACCAGTGGCCATCTGAGGTGTTTCCCTGGCTCTGAAGGGGTAGGCACGAT 123	CCCAAACCCCAAGTGTGGGAAAATGGGGTGGGTGTCCTGATTTGGAAGGTTCCAGTGAG 52			GTATGTGAAGGCCTTCCCTTTTACAAACAAGAATCAGCAGAAGGAAATGATCGAAAACCAA 1	TAAAAACCCAGAAGAGTCCAAGAGTCCAAGCAAACTACCGTGCGATGCCTGGAAGTAAGAAAGTAAAAAACTACCGTGCGATGCCTGGAAGTAAAAAAAA	

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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 1201)
Li,W.B., Gruber,C., Jessee,J. and Polayes,D.
Full-length cDNA libraries and normalization
Unpublished (2001)
On Feb 15, 2001 this sequence version replaced gi:12887768.
Contact: Genoscope
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BP 191 91006 EVRY cedex - France
Email: seqref@genoscope.cns.fr, Web : www.genoscope.cns.fr
Library was constructed by Life Technologies, a division of
Invitrogen. This sequence belongs to sequence cluster 5952.1
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AL550621 Homo sapiens PLACENTA COT 25-NORI clone CS0DI058YN14 5-PRIME, mRNA sequence AL550621
AL550621.2 GI:31272438
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/wol_type="mRNA"
/db_xref="taxon:9606"
/clone="CS0DI058YN14"
/tissue_type="PLACENTA COT 25-NORMALIZED"
/clone_lib="Homo sapiens PLACENTA COT 25-NORMALIZED"
/note="1st strand cDNA was primed with a NotI-oligo(dT)
primer. Five prime end enriched, double-strand cDNA was digested with Not I and cloned into the Not I and EcoR sites of the pCMVSPORT 6 vector. Library was normalized
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more information about this cluster, see http://www.genoscope.cns.fr/cgi-bin/cluster.cgi?seq=CSODIO58DG07QP1&cluster=5952.r. CFeng Liang Email : fliang@lifetech.com URL : http://fulllength.invitrogen.com/ InVitroGen Corporation Faraday Avenue Genoscope sequence ID : CSODIO58DG07QP1.
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/clone lib="Homo sapiens PLACENTA COT 25-NORMALIZED"
/note="1st strand cDNA was primed with a NotI-oligo(dT)
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cgi-bin/cluster.cgi?seq=CSODIO33CB06NP1&cluster=5952.r. Contac
Feng Liang Email : fliang@lifetech.com URL :
http://fulllength.invitrogen.com/ InVitroGen Corporation 1600
Faraday Avenue Genoscope sequence ID : CSODIO33CB06NP1.
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Email: seqref@genoscope.cns.fr, Web : www.genoscope.cns.fr
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Library was constructed by Life Technologies, a division of
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Mammalia; Eutheria; Primates; Catarrhini; Hor 1 (bases 1 to 1201)
Li,W.B., Gruber, C., Jessee, J. and Polayes, D. Full-length cDNA libraries and normalization Unpublished (2001)
On Feb 15, 2001 this sequence version replacements Genoscope
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/db_xref="taxon:9606"
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/note="1st strand cDNA was primed with a NotI-oligo(dT)
primer. Five prime end enriched, double-strand cDNA was
digested with Not I and cloned into the Not I and EcoR V
sites of the pCMVSPORT 6 vector. Library was normalized.
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BP 191 91006 EVRY cedex - France
Email: seqref@genoscope.cns.fr, Web: www.genoscope.cns.fr
Library was constructed by Life Technologies, a division of
Invitrogen. This sequence belongs to sequence cluster 5952.r Fc
more information about this cluster, see
http://www.genoscope.cns.fr/
cgi-bin/cluster.cgi?seq=CSODI067AD08NP1&cluster=5952.r. Contact
Feng Liang Email: fliang@lifetech.com URL:
http://fulllength.invitrogen.com/ InVitroGen Corporation 1600
Faraday Avenue Genoscope sequence ID: CSODI067AD08NP1.
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Mammalia; Eutheria; Primates; Catarrhini; Hominid
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Li,W.B., Gruber, C., Jessee, J. and Polayes, D.
Full-length cDNA libraries and normalization
Unpublished (2001)
On Feb 15, 2001 this sequence version replaced gi
Contact: Genoscope
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/tissue_type="PLACENTA COT 25-NORMALIZED"
/clone_lib="Homo sapiens PLACENTA COT 25-NORMALIZED"
/rlose="1st strand cDNA was primed with a NotI-oligo(dT)
primer. Five prime end enriched, double-strand cDNA was digested with Not I and cloned into the Not I and EcoR I sites of the pCMVSPORT 6 vector. Library was normalized.
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Homo sapiens
Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

E 1 (bases 1 to 1201)
S Li, W.B., Gruber, C., Jessee, J. and Polayes, D.
Full-length cDNA libraries and normalization
Unpublished (2001)
On Feb 15, 2001 this sequence version replaced gi:12879852.
Contact: Genoscope
Genoscope - Centre National de Sequencage
BP 191 91006 EVRY cedex - France
Genoscope - Centre Operation and Contact: Web: www.genoscope.cns.fr
Library was constructed by Life Technologies, a division of
Invitrogen. This sequence belongs to sequence cluster 5952.r For
more information about this cluster, see
http://www.genoscope.cns.fr/
cgi-bin/cluster.cgi?seq=CSODI029AG12NP1&cluster=5952.r. Contact
Feng Liang Email: fliang@lifetech.com URL:
http://fulllength.invitrogen.com/ InVitroGen Corporation 1600
Faraday Avenue Genoscope sequence ID: CSODI029AG12NP1.
Location/Qualifiers

1. 1201
Location/Qualifiers
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primer. Five prime end enriched, double-strand cDNA was digested with Not I and cloned into the Not I and EcoR V sites of the pCMVSPORT 6 vector. Library was normalized."
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722 TCCACGGAGAAAATTGATTTGTGTCACAGAAGTTTTTATGGAAACTAGCACCATGTC 781 798 TACAGAAACTGAACCATTTGTTGAAATAAAGCAGCATTCAAGAATGAAGCTGCTGGGTT 857		AL575514 AL575514 AL575514 AL575514 AL575514 Clone CS0DI059YA12 3-PRIME, mRNA sequence. AL575514 AL575714 AL575514 AL57514 AL575514 AL5	S Li, W.B., Gruber, C., Jessee, J. and Polayes, D. Full-length cDNA libraries and normalization Unpublished (2001) On Feb 16, 2001 this sequence version replaced gi:12936752. Contact: Genoscope Genoscope - Centre National de Sequencage BP 191 91006 EVRY cedex - France BR 191 91006 EVRY cedex - France Email: seqref@genoscope.cns.fr, Web: www.genoscope.cns.fr Library was constructed by Life Technologies, a division of Invitrogen. This sequence belongs to sequence cluster 5952.r For more information about this cluster, see http://www.genoscope.cns.fr/ cgi-bin/cluster.cgi?seq=CSOD1059BA06NP1&cluster=5952.r. Contact: Feng Liang Email: fliang@lifetech.com URL: http://fulllength.invitrogen.com/ InVitroGen Corporation 1600 Faraday Avenue Genoscope sequence ID: CSODI059BA06NP1. Location/Qualifiers	ganism="Homo sapiens" l_type="mRNA" xref="taxon:9606" one="CSODI059YA12" ssue type="PLACENTA COT 25-NORMALIZED" one_lib="Homo sapiens PLACENTA COT 25-NORMALIZED" te="lst strand cDNA was primed with a NotI-oligo(dT) ner. Five prime end enriched, double-strand cDNA was ested with Not I and cloned into the Not I and EcoR V es of the pCMVSPORT 6 vector. Library was normalized."	2; 11 11

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primer. Five prime end enriched, double-strand cDNA was digested with Not I and cloned into the Not I and EcoR V sites of the pCMVSPORT 6 vector. Library was normalized.
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Email: seqref@genoscope.cns.fr, Web : www.genoscope.cns.fr
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Invitrogen. This sequence belongs to sequence cluster 5952.r F
more information about this cluster, see
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cgi-bin/cluster.cgi?seq=CS0AI040CB02QPl&cluster=5952.r. Contac
Feng Liang Email : fliang@lifetech.com URL :
http://fulllength.invitrogen.com/ InvitroGen Corporation 1600
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Full-length cDNA libraries and normalization
Unpublished (2001)
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/mol type="mRNA"
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/clone="CSODI069YN02"
/tissue type="PLACENTA COT 25-NORMALIZED"
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/note="1st strand cDNA was primed with a NotI-oligo(dT)
primer. Five prime end enriched, double-strand cDNA was digested with Not I and cloned into the Not I and EcoR V sites of the pCMVSPORT 6 vector. Library was normalized."
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BP 191 91006 EVRY cedex - France
Brail: seqref@genoscope.cns.fr, Web: www.genoscope.cns.fr
Invitrogen. This sequence belongs to sequence cluster 5952.r For more information about this cluster, see
http://www.genoscope.cns.fr/
cgi-bin/cluster.cgi?seq=CS0DI069DG01NP1&cluster=5952.r. Contact
Feng Liang Email: fliang@lifetech.com URL:
http://fulllength.invitrogen.com/ InVitroGen Corporation 1600
Faraday Avenue Genoscope sequence ID: CS0DI069DG01NP1.
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1 (bases 1 to 1007)
Li,W.B., Gruber,C., Jessee,J. and Polayes,D.
Full-length cDNA libraries and normalization
Unpublished (2001)
On Feb 16, 2001 this sequence version replaced
Contact: Genoscope
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

I (bases 1 to 1201)

Li, W.B., Gruber, C., Jessee, J. and Polayes, D.
Full-length cDNA libraries and normalization
Unpublished (2001)

On Feb 16, 2001 this sequence version replaced gi:12934641.

Contact: Genoscope
Genoscope - Centre National de Sequencage
BP 191 91006 EVRY cedex - France
BP 191 91006 EVRY cedex - France
Email: seqref@genoscope.cns.fr, Web: www.genoscope.cns.fr
Library was constructed by Life Technologies, a division of
Invitrogen. This sequence belongs to sequence cluster 5952.r For
more information about this cluster, see
http://www.genoscope.cns.fr/
cgi-bin/cluster.cgi?seq=CSODIO58DG07NP1&cluster=5952.r. Contact:
Feng Liang Email: fliang@lifetech.com URL:
http://fulllength.invitrogen.com/ InVitroGen Corporation 1600
Faraday Avenue Genoscope sequence ID: CSODIO58DG07NP1.
Location/Qualifiers
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primer. Five prime end enriched, double-strand cDNA was digested with Not I and cloned into the Not I and EcoR sites of the pCMVSPORT 6 vector. Library was normalized
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Email: segref@genoscope.cns.fr, Web: www.genoscope.cns.fr
Library was constructed by Life Technologies, a division of
Invitrogen. This sequence belongs to sequence cluster 5952.r
more information about this cluster, see
http://www.genoscope.cns.fr/
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Direct Submission
Submitted (11-FEB-1999) Hematology-Oncology, University of Cincinnati, 231 Bethesda Avenue, Cincinnati, Ohio 45267-05(3) (bases 1 to 1285)
Winkelmann, J.C., Basu, S., Ozdemir, E. and Blough, R.I.

Direct Submission
Submitted (12-OCT-1999) Hematology-Oncology, University of Cincinnati, 231 Bethesda Avenue, Cincinnati, Ohio 45267-05(Sequence update by submitter
On Oct 13, 2000 this sequence version replaced gi:5732667.

Location/Qualifiers

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Ota,T., Isogai,T., Nishikawa,T., Kawa:
Hayashi,K.
Secretory protein or membrane protein
Patent: EP 1067182-A 149 10-JAN-2001;
Helix Research Institute (JP)
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FEATURES Location/Qualifiers 11755 / organism="Homo sapiens" / mol_type="unassigned DNA" / db_xref="taxon:9606" 20171169 / note="unnamed protein product" / codon_start=1 / protein_id="CAC39756.1" / db_xref="lat3726.38" / db_xref="lat3726.38" / db_xref="lat3726.1" / translation="MarcFsLVLiLiTSIWTTRLLVQGSLRAEELSIQVSCRIMGITLV / kranQUINFTEAKEACRILGLSLAGKDQVETALKASFETCSYGWVGDGFVVISRISP NPKCGKNGVGVLIMKVPVSRQFAAYCTNSSDTWTNSCIPEITTTROTATQTT EFIVSDSTYSUASPSYTIPAPATILVLALLFFGAAAGLGFCYVKRYVRAFFTNROQKE MIETKVVKEBERANDSNPNBESKKTDKNPEESKSPSKTTVRCLEAEV" ORIGIN	Alignment Scores:	Db 441 AGCTTTGAAACTTGCAGCTATGCCTGGGTTGCAGTTCTGTGGTCTCTTGGATT 500 OY 101 SerProAshProLysCysGlyLysAsnGlyValGuyValLeuIleTrpLysValProVal 120 Db 501 AGCCCAACCCCAACTCTGGGAAAATGGGGTGGTGCTGTTTGGAAGGTTCCAGTG 560 OY 121 SerArgGlnPheAlaAlaTyrCysTyrAsnSerSerAspThrTrpThrAshSerCysIle 140 Db 561 AGCCGACAGTTGCAGCCTATTGTTACAACTCGATTGATTTGTAAGGTTCCAGTG 560 OY 141 ProGlullelleThrThrLysAspProllePheAsnTrdTGAACTTGATTT 160 OY 161 ProGlullelleThrThrTysAspProllePheAsnTrdInThrAlaThrIn 160 OY 161 GluPheIleValSerAspSerThrTyrSerValAlaSerProTyrSerThrTleProAla 180 OY 181 ProThrThrThrThrCAGTGACAGTACTCGGTGGCATCCCTTACTCTACTCTAC

Eutel

Vertebrata; ; ; Hominidae;

Craniata; Ve Catarrhini;

Chordata; Primates;

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lsogai, T. and Yamamoto, J.

Isogai, T. and Yamamoto, J.

Direct Submission

Submitted (20-MAR-2002) Takao Isogai, Helix Research Institute,
Genomics Laboratory; 1532-3 Yana, Kisarazu, Chiba 292-0812, Japan
(E-mail:genomics@hri.co.jp, Tel:81-438-52-3986)

HRI human cDNA sequencing project; cDNA 5'- & 3'-end one pass
sequencing, clone selection and full insert sequencing: Helix
Research Institute (supported by Japan Key Technology Center etc.);
CDNA library construction: Institute of Medical Science, University of Tokyo, Laboratory of Genome Structure, Human Genome Center.

1. 1755
                                                           Ota, T., Nishikawa, T., Suzuki, Y., Kawai-Hio, Y., Hayashi, K. Ishii, S., Saito, K., Yamamoto, J., Wakamatsu, A., Nagai, T., Nakamura, Y., Nagahari, K., Sugano, S. and Isogai, T. HRI human cDNA sequencing project
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AK075443.1 GI:22761535
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Conservative:
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1 (bases 1 to 2029)
Daniel, S., Gilmore, J.,
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1 (bases 1 to 2372)
Ashkenazi,A., Botstein,D., Desnoyers,L., Eaton,D.L., Ferrara,N.,
Filvaroff,E., Fong,S., Gao,W.-Q., Gerber,H., Gerritsen,M.E.,
Goddard,A., Godowski,P.J., Grimaldi,J.C., Gurney,A.L., Hillan,K.J.,
Kljavin,I.J., Mather,J.P., Pan,J., Paoni,N.F., Roy,M.A.,
Stewart,T.A., Tumas,D., Williams,P.M. and Wood,W.I.
Secreted and transmembrane polypeptides and nucleic acids encoding
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Patent: US 6635468-A 200 21-OCT-2003;
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Homo sapiens (human)

Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Bukaryota; Metazoa; Chordata; Catarrhini; Hominidae; Homo.

E 1 (bases 1 to 2029)

Lal, P., Tang, Y.T., Gorgone, G.A., Corley, N.C., Guegler, K.J.,

Raddy, R., Hillman, J.L. and Bandman, O.

Human signal peptide-containing protein

Patent: JP 2002519030-A 64 02-JUL-2002;

Homo sapiens (human)

L Patent: JP 200251930-A/64

PD 02-JUL-2002

PR 26-JUN-1999 US 60/094983 PR

26-JUN-1999 US 60/102686,11-DEC-1998 US 60/112129 PI PREETI

LAL, Y TOM TANG, GINA A GORGONE, NEIL C CORLEY, KARL J PI GUEGLER,

PI MARIAH R BAUGHN, INGRID E AKERBLOM, JANICE AU YOUNG, HENRY YUE,

PI CHANDRA PATTERSON, ROOPA REDDY, JENNIFER L HILLMAN, OLGA BANDMAN

PC CLINIS/09, A61R39/395, A61R45/00, A61P9/00, A61P5/00,

PC A61P25/00, A
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                                                           Baker, K.P., Ferrara, N., Gerber, H., Gerritsen, M.E., Goddard, A., Godowski, P.J., Gurney, A.L., Hillan, K.J., Marsters, S.A., Pan, J., Paoni, N.F., Stephan, J.P., Watanabe, C.K., Williams, P.M., Wood, W.I. and Ye, W.
Compositions and methods for the diagnosis and treatment of disorders involving angiogenesis
Patent: WO 0200690-A 31 03-JAN-2002;
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	Ολ	221 GluAsnLysAlaAlaPheLysAsnGluAlaAlaGlyPheGlyGlyValProThrAlaLeu 240
	Db	820 GAAAATAAAGCAGCATTCAAGAATGAAGCTGCTGGGTTTGGAGGTGTCCCCACGGCTCTG 879
	Qy	241 LeuValLeuAlaLeuLeuPhePheGlyAlaAlaAlaGlyLeuGlyPheCysTyrValLys 260
	дc	880 cradicericereretriarierieredeciderecidereresinadariarie
	QY	261 ArgTyrValLysAlaPheProPheThrAsnLysAsnGlnGlnLysGluMetIleGluThr 280
	Db	940 AGGTATGTGAAGGCCTTCCCTTTTACAAACAAGAATCAGCAGAAGGAAATGAAGAAACC 999
	Qy	281 LysValValLysGluGluLysAlaAsnAspSerAsnProAsnGluGluSerLysLysThr 300
	Db 1	
	ζQ	301 AspLysAsnProGluGluSerLysSerProSerLysThrValArgCysLeuGluAla 320
	1 40	1060 GATAAAAACCCAGAAGAGTCCAAGAGTCCAAAGCAAAACTACCGTGCGATGCCTGGAAGCT 1119
	,	Gluval 322
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	RESULT 11 AX697609 LOCUS DEFINITION ACCESSION VERSION KEYWORDS	AX697609 Sequence 200 from P AX697609 AX697609.1 GI:2949
	SOURCE	
	REFERENCE AUTHORS	Ashkenazi, A.J., Botstein, D., Desnoyers, L., Eaton, D.L., Ferrara, N., Filvaroff, E., Fong, S., Gao, W.Q., Gerber, H., Gerritsen, M.E., Goddard, A., Godowski, P.J., Grimaldi, C.J., Gurney, A.L., Hillan, K.J., Kljavin, I.J., Mather, J.P., Pan, J., Paoni, N.F., Roy, M.A.,
	TITLE	Tumas, D., Williams, P.M. and Wood, W.I ransmembrane polypeptides and nuclei
	JOURNAL	4311-A 2 (US)
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JP 2002223786-A/165.
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Mammalia; Eutheria; Pl
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JP 2002238586-A/165.
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1. .2372
/organism='Homo sapir
1. .2372
/organism="Homo sari/mol_type="ger"
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397 US 60/059115,17-SEP-1997 US 60/059113,17-SEP-1997 US 60/059113,17-SEP-1997 US 60/059119,18-SEP-1997 US 60/06287,17-OCT-1997 US 60/063486,24-OCT-1997 US 60/063486,24-OCT-1997 US 60/063329,27-OCT-1997 US 60/063329,27-OCT-1997 US 60/063549,28-OCT-1997 US 60/06354,28-OCT-1997 US 60/06354,29-OCT-1997 US 60/06354,29-OCT-1997 US 60/063732,31-OCT-1997 US 60/063732,31-OCT-1997 US 60/063732,31-OCT-1997 US 60/064215,29-OCT-1997 US 60/064809,12-NOV-1997 US 60/066772,24-NOV-1997 US 60/066772,24-NOV-1997 US 60/066453,25-NOV-1997 US
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29: gb_gss2:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Description		AL550279 AL550279	1,550099 AT,55009	46669 AL54666	L551020 AL55102	L553858 AL55385	X459046 BX4590	BX366718 BX36671	L550911 AL55091	L549512 AL54951	43874 AL54387	L547774 AL54777	552127 AL552127	BX4UZ5US BA4UZ5	4430 ALD4443	550651 AT.557661	1,550829 A1,55082	L546217 AL54621	50615 ALS506	16623 AL54662	52777 AL552777	761420 603044	15331 AL545331	004726 Mus musc	959809 AGENCOU	238639 FNPBCHU	18211 BX4182	BRYON DIRECTOR	03/12 ALDDS/12	*83354 6UZDU#4.	166260 002000 166791 BX366791	704927 BY7049	046671 zf12d09.	B994314 AGENCO	546565 AL546565	B229605 AGENCOUR	763579 60305	BUS04417 AGENCO	553920 AL553920	A407758 1003907	110966 Shultz	B988195 AG	69328 yul9a0	
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ALIGNMENTS

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DEFINITION	AL550279 Homo sapiens PLACENTA COT 25-NORMALIZED Homo sapiens cDNA clone CS0DI039YJ06 5-PRIME, mRNA sequence.
ACCESSION	AL550279
VERSION	AL550279.2 GI:31272096
KEYWORDS	EST.
SOURCE	Homo sapiens (human)
ORGANISM	Homo sapiens
	Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
	id; Frimdres; 154)
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/clone_lib="Homo sapiens PLACENTA COT 25-NORMALIZED"
/note="1st strand cDNA was primed with a NotI-oligo(dT)
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                                              Genoscope - Centre National de Sequencage
BP 191 91006 EVRY cedex - France
Email: seqref@genoscope.cns.fr, Web: www.genoscope.cns.fr
Library was constructed by Life Technologies, a division of
Invitrogen. This sequence belongs to sequence cluster 5952.r Fc
more information about this cluster, see
http://www.genoscope.cns.fr/
cgi-bin/cluster.cgi?seq=CS0DI039DE03QP1&cluster=5952.r. Contact
Feng Liang Email: fliang@lifetech.com URL:
http://fulllength.invitrogen.com/ InVitroGen Corporation 1600
Faraday Avenue Genoscope sequence ID: CS0DI039DE03QP1.
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/tissue_type="PLACENTA COT 25-NORMALIZED"
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Eull-length cDNA libraries and normalization

Unpublished (2001)

On Feb 15, 2001 this sequence version replaced gi:12887768.

Contact: Genoscope

Genoscope - Centre National de Sequencage

Genoscope - Centre National de Sequencage

BP 191 91006 EVRY cedex - France

Email: seqref@genoscope.cns.fr, Web: www.genoscope.cns.fr

Library was constructed by Life Technologies, a division of

Invitrogen. This sequence belongs to sequence cluster 5952.r Fc

more information about this cluster, see

http://www.genoscope.cns.fr/

cgi-bin/cluster.cgi?seq=CSODIO58DG07QPl&cluster=5952.r. Contact

Feng Liang Email: fliang@lifetech.com URL:

http://fulllength.invitrogen.com/ InVitroGen Corporation 1600

Faraday Avenue Genoscope sequence ID: CSODIO58DG07QPl.

Location/Qualifiers
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1 (bases 1 to 1015)

Li, W.B., Gruber, C., Jessee, J. and Polayes, D.

Full-length cDNA libraries and normalization
Unpublished (2001)
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Homo sapiens (human)

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Homo sapiens

Homo sapiens

Homo sapiens

Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleosto

Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

Li, W.B., Gruber, C., Jessee, J. and Polayes, D.

Full-length cDNA libraries and normalization

Unpublished (2001)

On Feb 15, 2001 this sequence version replaced gi:12880008.

Contact: Genoscope

Genoscope - Centre National de Sequencage

BP 191 91006 EVRY cedex - France

BP 191 91006 EVRY cedex - France

BR 191 91006 EVRY cedex - France

Email: seqref@genoscope.cns.fr, Web: www.genoscope.cns.fr

Library was constructed by Life Technologies, a division of

Invitrogen. This sequence belongs to sequence cluster 5952.r F

more information about this cluster, see

http://www.genoscope.cns.fr/

cgi-bin/cluster.cgi?seq=CSODI029CE05QPl&cluster=5952.r. Contac

Feng Liang Email: fliang@lifetech.com URL:
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primer. Five prime end enriched, double-strand cDNA was digested with Not I and cloned into the Not I and EcoR sites of the pCMVSPORT 6 vector. Library was normalized
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primer. Five prime end enriched, double-strand cDNA was digested with Not I and cloned into the Not I and EcoR sites of the pCMVSPORT 6 vector. Library was normalized
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                                                                      BP 191 91006 EVRY cedex - France
Email: segref@genoscope.cns.fr, Web: www.genoscope.cns.fr
Library was constructed by Life Technologies, a division of
Invitrogen. This sequence belongs to sequence cluster 5952.r I
more information about this cluster, see
http://www.genoscope.cns.fr/
cgi-bin/cluster.cgi?seq=CSODIO77CE09QP1&cluster=5952.r. Contaction/cluster.invitrogen.com/ InvitroGen Corporation 1600
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleoston
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 913)
Li,W.B., Gruber,C., Jessee,J. and Polayes,D.
Li,W.B., Gruber,C., Jessee,J. and Polayes,D.
Full-length cDNA libraries and normalization
Unpublished (2001)
Contact: Genoscope
Genoscope - Centre National de Sequencage
Genoscope - Centre National de Sequencage
BP 191 91006 EVRY cedex - France
BR 191 91006 EVRY cedex - France
BR 191 91006 EVRY cedex - France
Email: seqref@genoscope.cns.fr, Web: www.genoscope.cns.fr
Library was constructed by Life Technologies, a division of
Invitrogen. This sequence belongs to sequence cluster 5952.r For more information about this cluster, see
http://www.genoscope.cns.fr/
cgi-bin/cluster.cgi?seq=CSODE011DG10QP1&cluster=5952.r. Contact
Feng Liang Email: fliang@lifetech.com URL:
http://fulllength.invitrogen.com/ InVitroGen Corporation 1600
Faraday Avenue Genoscope sequence ID: CSODE011DG10QP1.
Location/Qualifiers
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EST.
Homo sapiens (human)
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primer. Five prime end enriched, double-strand cDNA was digested with Not I and cloned into the Not I and EcoR V sites of the pCMVSPORT 6 vector. Library was normalized."
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Li, W.B., Gruber, C., Jessee, J. and Polayes, D.
Full-length cDNA libraries and normalization
Unpublished (2001)
Contact: Genoscope
Contact: Genoscope
Genoscope - Centre National de Sequencage
BP 191 91006 EVRY cedex - France
Email: segref@genoscope.cns.fr, Web: www.genoscope.cns.fr
Library was constructed by Life Technologies, a division of
Invitrogen. This sequence belongs to sequence cluster 5952.r Fc
more information about this cluster, see
http://www.genoscope.cns.fr/
cgi-bin/cluster.cgi?seq=CSOAI040CB02QPl&cluster=5952.r. Contact
Feng Liang Email: fliang@lifetech.com URL:
http://fulllength.invitrogen.com/ InVitroGen Corporation 1600
Faraday Avenue Genoscope sequence ID: CSOAI040CB02QPl.
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'note="1st strand cDNA was primed with a NotI-oligo(dT)

orimer. Five prime end enriched, double-strand cDNA was ligested with Not I and cloned into the Not I and EcoR sites of the pCMVSPORT 6 vector. Library was normalized
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Genoscope - Centre National de Sequencage
BP 191 91006 EVRY cedex - France
Email: seqref@genoscope.cns.fr, Web : www.genoscope.cns.fr
Library was constructed by Life Technologies, a division of
Invitrogen. This sequence belongs to sequence cluster 5952.r For
more information about this cluster, see
http://www.genoscope.cns.fr/
cgi-bin/cluster.cgi?seq=CSODI065CB09QP1&cluster=5952.r. Contact
Feng Liang Email: fliang@lifetech.com URL:
http://fulllength.invitrogen.com/ InvitroGen Corporation 1600
Faraday Avenue Genoscope sequence ID: CSODI065CB09QP1.
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ALSS0911 Homo sapiens PLACENTA
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Mammalia; Eutheria; P
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primer. Five prime end enriched, double-strand cDNA was
digested with Not I and cloned into the Not I and EcoR sites of the pCMVSPORT 6 vector. Library was normalized
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Library was constructed by Life Technologies, a division of
Library was constructed by Life Technologies, a division of
Invitrogen. This sequence belongs to sequence cluster 5952.r I
more information about this cluster, see
http://www.genoscope.cns.fr/
cgi-bin/cluster.cgi?seq=CSODI044DG08QP1&cluster=5952.r. Contac
Feng Liang Email: fliang@lifetech.com URL:
http://fulllength.invitrogen.com/ InVitroGen Corporation 1600
Faraday Avenue Genoscope sequence ID: CSODI044DG08QP1.
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Mammalia; Eutheria; Primates; Catarrhini; Homin
1 (bases 1 to 972)
Li,W.B., Gruber,C., Jessee,J. and Polayes,D.
Full-length cDNA libraries and normalization
Unpublished (2001)
On Feb 15, 2001 this sequence version replaced
Contact: Genoscope
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1 (bases 1 to 911)

Li,W.B., Gruber, C., Jessee, J. and Polayes, D.

Full-length cDNA libraries and normalization
Unpublished (2001)
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/mol_type="mRNA"
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/clone="CSODI005yG13"
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/note="1st strand cDNA was primed with a NotI-oligo(dT)
primer. Five prime end enriched, double-strand cDNA was digested with Not I and cloned into the Not I and EcoR V sites of the pCMVSPORT 6 vector. Library was normalized.
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Contact: Genoscope

Genoscope - Centre National de Sequencage

Genoscope - Centre National de Sequencage

BP 191 91006 EVRY cedex - France

BP 191 91006 EVRY cedex - France

Email: seqref@genoscope.cns.fr, Web: www.genoscope.cns.fr

Library was constructed by Life Technologies, a division of

Invitrogen. This sequence belongs to sequence cluster 5952.r Fc

more information about this cluster, see

http://www.genoscope.cns.fr/

cgi-bin/cluster.cgi?seq=CS0DI005AD07QP1&cluster=5952.r. Contac'

Feng Liang Email: fliang@lifetech.com URL:

http://fulllength.invitrogen.com/ InvitroGen Corporation 1600

Faraday Avenue Genoscope sequence ID: CS0DI005AD07QP1.

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primer. Five prime end enriched, double-strand cDNA was
digested with Not I and cloned into the Not I and EcoR V
sites of the pCMVSPORT 6 vector. Library was normalized.
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1 (bases 1 to 1201)

Li,W.B., Gruber,C., Jessee,J. and Polayes,D.

Full-length cDNA libraries and normalization
Unpublished (2001)

On Feb 15, 2001 this sequence version replaced gi:12882152.

Contact: Genoscope
Genoscope - Centre National de Sequencage
BP 191 91006 EVRY cedex - France
BRail: seqref@genoscope.cns.fr, Web: www.genoscope.cns.fr
Library was constructed by Life Technologies, a division of
Invitrogen. This sequence belongs to sequence cluster 5952.r For
more information about this cluster, see
http://www.genoscope.cns.fr/
cgi-bin/cluster.cgi?seq=CS0DI033CB06QP1&cluster=5952.r. Contact
Feng Liang Email: fliang@lifetech.com URL:
http://fulllength.invitrogen.com/ InVitroGen Corporation 1600
Faraday Avenue Genoscope sequence ID: CS0DI033CB06QP1.
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Ini,W.B., Gruber,C., uesacc,-
Unpublished (2001)
Contact: Genoscope
Genoscope - Centre National de Sequencage
Genoscope - Centre National de Sequencage
BP 191 91006 EVRY cedex - France
BP 191 91006 EVRY cedex - France
Email: seqref@genoscope.cns.fr, Web: www.genoscope.cns.fr
Library was constructed by Life Technologies, a division of
Library was constructed by Life Technologies, a division of
Library was constructed by Life Technologies.

Lostination about this cluster, see

http://www.genoscope.cns.fr/
cgi-bin/cluster.cgi?seq=CSlAI012ZA06QPI&cluster=5952.r. Contact Feng Liang Email: fliang@lifetech.com URL:

Library was constructed by Life Technologies.

Location/Qualifiers

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Location/Genoscope sequence ID: CSIAI012ZA06QPI.

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/clone_lib="Homo sapiens PLACENTA COT 25-NORMALIZED"
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Homo sapiens

Homo sapiens

Homatazoa; Chordata; Craniata; Vertebrata; Euteleostom

Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 1201)

Li, W.B., Gruber, C., Jessee, J. and Polayes, D.

Full-length cDNA libraries and normalization

Unpublished (2001)

On Feb 15, 2001 this sequence version replaced gi:12876910.

Contact: Genoscope

Genoscope - Centre National de Sequencage

BP 191 91006 EVRY cedex - France

Genoscope - Centre National de Sequencage

BP 191 91006 EVRY cedex - France

Email: segref@genoscope.cns.fr, Web: www.genoscope.cns.fr

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-LOOPEXT=0 -UNITS=bits -START=1 -END=-1 -MATRIX=blosum62 -TRANS=human40.cdi
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-USER=US10063670 @CGN 1 1 69 @runat_10082004 165353_13647 -NCPU=6 -ICPU=3
-NO_MMAP -LARGEQUERY -NEG_SCORES=0 -WAIT -DSPBLOCK=100 -LONGLOG
-DEV_TIMEOUT=120 -WARN_TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5 -FGAPOP=-FGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7
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; Sequence 13, Application US/09232160
; Patent No. 6368794
; GENERAL INFORMATION:
; APPLICANT: Steve Daniel
; APPLICANT: James Gilmore
; APPLICANT: Laura Stuve
; TITLE OF INVENTION: DETECTION OF ALTER
; TITLE OF INVENTION: PROLIFERATION
; FILE REFERENCE: PA-0003 US
; CURRENT APPLICATION NUMBER: US/09/232;
; CURRENT FILING DATE: 1999-01-15
; NUMBER OF SEQ ID NOS: 23
; SOFTWARE: PERL Program
; SEQ ID NO 13
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; APPLICANT: Genentech, ]
; APPLICANT: Ashkenazi,
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OR APPLICATION NUMBER: PCT/US99/28565

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R APPLICATION NUMBER: PCT/US99/21547
R FILING DATE: 1999-09-15
R APPLICATION NUMBER: PCT/US99/23089
R FILING DATE: 1999-10-05
R APPLICATION NUMBER: PCT/US99/28214
R FILING DATE: 1999-11-29
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DR FILING DATE: 2000-02-22

DR APPLICATION NUMBER: US 60/143,048

DR FILING DATE: 1999-07-07

DR APPLICATION NUMBER: US 60/145,698

DR FILING DATE: 1999-07-26

DR FILING DATE: 1999-07-28

DR FILING DATE: 1999-09-08

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Let, Timothy A.
Lumas, Daniel
Williams, P. Mickey
LANT: Wood, William, I.
TITLE OF INVENTION: Secreted and Trans
FILE REFERENCE: 10466-14
CURRENT APPLICATION NUMBER: US/OC
PRIOR APPLICATION NUMBEP
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Gerritsen, Mary E.
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Godowski, Paul J.
Grimaldi, Christopher J
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APPLICANY: Gather, Hanspeter
APPLICANY: Gartiteen, Mary E.
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APPLICANY: Galmaid, Curistopher J.
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APPLICANY: Milaid, Mastin L.
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APPLICANY: Roy, Margaret Ann
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APPLICANY: Stewart, Timchly A.
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PRIOR FILING DATE: 2000-01-05
NUMBER OF SEQ ID NOS: 423
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APPLICATION NUMBER: PCT/US99/28564
FILING DATE: 1999-12-02
APPLICATION NUMBER: PCT/US99/28565
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                         se 200, Application US/09905125A
No. 6664376
INFORMATION:
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Desnoyers, Luc
Eaton, Dan L.
Ferrara, Napoleone
Filvaroff, Ellen
Fong, Sherman
Gao, Wei-Qiang
Gerritsen, Mary E.
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APPLICATION NUMBER: PCT/US99/30095
FILING DATE: 1999-12-16
APPLICATION NUMBER: PCT/US99/30911
                                                                                                                           Sequence 200, Application US/09902775A
Patent No. 6686451
GENERAL INFORMATION:
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Ferrara, Napoleone
Filvaroff, Ellen
Fong, Sherman
Gao, Wei-Qiang
Gerber, Hanspeter
Gerritsen, Mary E.
Goddard, A.
Godowski, Paul J.
Grimaldi, Christopher J
Gurney, Austin L.
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Mather, Jennie
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LICANI: Paoni, Nicholas F.
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LICANI: Roy, Margaret Ann
PLICANI: Stewart, Timothy A.
PLICANI: Stewart, Timothy A.
PLICANI: Williams, P. Mickey
PLICANI: Wood, William, I.
TLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
TLE OF INVENTION: Acids Encoding the Same
CURRENT APPLICATION NUMBER: US/09/902,775A
CURRENT FILING DATE: 2001-07-10
PRIOR APPLICATION NUMBER: PCT/US00/04414
PRIOR FILING DATE: 2000-02-22
PRIOR FILING DATE: 1999-07-07
PRIOR FILING DATE: 1999-07-26
PRIOR FILING DATE: 1999-07-26
PRIOR FILING DATE: 1999-07-26
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PRIOR FILING DATE: 1999-12-20
PRIOR APPLICATION NUMBER: PCT/US99/30
PRIOR FILING DATE: 1999-12-20
PRIOR APPLICATION NUMBER: PCT/US00/00
PRIOR FILING DATE: 2000-01-05
NUMBER OF SEQ ID NOS: 423
SEQ ID NO 200
LENGTH: 2372
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Query Match:
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US-09-833-381-849

Sequence 849, Application US/09833381

Patent No. 6672186

GENERAL INFORMATION:

APPLICANT: Robison, Keith E.

TITLE OF INVENTION: No. 6672186el Nucleic

FILE REFERENCE: 5800-119

CURRENT APPLICATION NUMBER: US/09/833,381

CURRENT FILING DATE: 2001-04-11

PRIOR FILING DATE: 2000-02-29

NUMBER OF SEQ ID NOS: 2050

SOFTWARE: FastSEQ for Windows Version 3.0

SSEQ ID NO 849
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US-09-833-381-853

Sequence 853, Application US/09833381

Patent No. 6672186

GENERAL INFORMATION:

APPLICANT: Robison, Keith E.

TITLE OF INVENTION: No. 6672186el Nuclei

FILE REFERENCE: 5800-119

CURRENT APPLICATION NUMBER: US/09/833,38

CURRENT FILING DATE: 2001-04-11

PRIOR FILING DATE: 2000-02-29

NUMBER OF SEQ ID NOS: 2050

SOFTWARE: FastSEQ for Windows Version 3.
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Sequence 1, Application
Patent No. 5942417
GENERAL INFORMATION:
APPLICANT: NI, JIA
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Sequence 28, Application US/09724864

Patent No. 6380362

GENERAL INFORMATION:
APPLICANT: Watson, James D
APPLICANT: Murison, James G.
TITLE OF INVENTION: Polynucleotic
FILE REFERENCE: 11000.105001
CURRENT APPLICATION NUMBER: US/09/724,864
CURRENT FILING DATE: 2000-11-28
PRIOR APPLICATION NUMBER: U.S. No. 63803
PRIOR FILING DATE: 1999-12-23
NUMBER OF SEQ ID NOS: 72
SOFTWARE: FastSEQ for Windows Version 4.
SEQ ID NO 28
LENGTH: 1896
TYPE: DNA
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COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, I
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/r
FILING DATE: HFPTT
CLASSIFICATION
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                                                                                                                                   A:
US/08/892,88
                                                                                                                                                                        APPLICATION NUMBER: 60/021,762
FILING DATE: 15-JUL-1996
ATTORNEY/AGENT INFORMATION:
NAME: STEFFE, ERIC K
REGISTRATION NUMBER: 36,688
REFERENCE/DOCKET NUMBER: 1488.
                                       SEE: STERNE, KESSLER, G
1100 NEW YORK AVENUE,
WASHINGTON
       PATRICK J.
CD44-LIKE
                                                                                                                                                                                                                          TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-371-2600
TELEFAX: 202-371-2540
INFORMATION FOR SEQ ID NO: 1:
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1651.00
99.69%
99.69%
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       PATRICK
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EDNESS: single
REINER
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    APPLICANT: DILLON, PAT
TITLE OF INVENTION: CD
NUMBER OF SEQUENCES: 1
CORRESPONDENCE ADDRESS:
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                                                                        COUNTRY: USA
ZIP: 20005-3934
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Best Local Similarity:
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LOCATION:
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Matches:
Conservative:
Mismatches:
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TELEPHONE: 202-371-2600
TELEFAX: 202-371-2540
INFORMATION FOR SEQ ID NO: 12:
SEQUENCE CHARA-
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COUNTRY: USA
ZIP: 20005-3934
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: US/08/892,880
FILING DATE: HEREWITH
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 60/021,762
FILING DATE: 15-JUL-1996
ATTORNEY/AGENT INFORMATION:
NAME: STEFFE, ERIC K
REGISTRATION NUMBER: 36,688
REGISTRATION NUMBER: 1488.049
                                                                                                                                                                        SEE: STERNE, KESSLER, GG
: 1100 NEW YORK AVENUE,
WASHINGTON
                                                                  US/0889288
                                                                                                                           CD44-LIKE 1
                                                                                                    APPLICANT: GENTZ, REINER L.
APPLICANT: GENTZ, REINER L.
APPLICANT: DILLON, PATRICK J
TITLE OF INVENTION: CD44-LIK
NUMBER OF SEQUENCES: 15
CORRESPONDENCE ADDRESS:
ADDRESSEE: STERNE, KESSLER
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354.00
77.39%
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21.36%
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nucleic acid
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                                                 Sequence 12, Application U

Sequence 12, Application U

Patent No. 5942417

GENERAL INFORMATION:

APPLICANT: NI, JIAN

APPLICANT: GENTZ, REIN

APPLICANT: DILLON, PAT

TITLE OF INVENTION: CD
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Best Local Similarity
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STATE:
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Matches:
Conservative:
Mismatches:
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                                                                                                                                                                                                                                                                                                                                             ZIP: 20005-3934

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/892,880
                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION: 435
FILING DATE: HEREWITH
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 60/021,762
FILING DATE: 15-JUL-1996
ATTORNEY/AGENT INFORMATION:
NAME: STEFFE, ERIC K
REGISTRATION NUMBER: 36,688
REFERENCE/DOCKET NUMBER: 1488.0490001
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
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US-08-892-880-15
; Sequence 15, Application US/08892880
; Patent No. 5942417
; GENERAL INFORMATION:
; APPLICANT: GENTZ, REINER L.
; APPLICANT: GENTZ, REINER L.
                                                                                                                                                                                                                                                                                                                                                                                                                 HEREWITH
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F: GENTZ, REINER L.
F: DILLON, PATRICK J.
INVENTION: CD44-LIKE
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LINVENTION: CD4.
CORRESPONDENCE ADDRESS:
ADDRESSEE: STERNE, KES
STREET: 1100 NEW YORK,
CITY: WASHINGTON
STATE: DC
COUNTRY: USA
ZIP:
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nucleic acid
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS
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TOPOLOGY: linear
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APPLICATION NUMBER: US/08/892.880
                                                                                                         S-08-892-880-13
Sequence 13, Application US/08892880
Patent No. 5942417
GENERAL INFORMATION:
APPLICANT: NI, JIAN
                                                                                                                                                                                                              SEE: STERNE, KESSLER, G: 1100 NEW YORK AVENUE, WASHINGTON
                                                                                                                                                                                                                                                                   ZIP: 20005-JJE FORM:
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
JOMPITER: IBM PC COMPATIBLE
TOWNSTIER: IRM PC COMPATIBLE
TOWNSTIEM: PC-DOS/MS-D
                                                                                                                                                               REINER L.
, PATRICK J.
: CD44-LIKE
S: 15
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NE: 202-371-2600
C: 202-371-2540
I FOR SEQ ID NO: 13:
CHARACTERISTICS:
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FILING DATE: 15-JUL-1996
ATTORNEY/AGENT INFORMATION:
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I: 466 base pair nucleic acid
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                                                                                                                                             SENERAL INFORMATION:
APPLICANT: NI, JIAN
APPLICANT: GENTZ, REI
APPLICANT: DILLON, PA
TITLE OF INVENTION: (
NUMBER OF SEQUENCES:
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Best Local Similarity
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                                                                                                                                                                                                                                                                 COUNTRY: US
ZIP: 20005-
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STREET: 11
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554 ATAAC 179 Pro 614 CCTGA 183 674 GAAAG		CITY: Washington, D.C. COUNTRY: USA ZIP: 20007-5109 COMPUTER READABLE FORM: MEDIUM TYPE: Floppy disk COMPUTER: IBM PC compati OPERATING SYSTEM: PC-DOS SOFTWARE: Patentin Relea CURRENT APPLICATION DATA: APPLICATION NUMBER: US/0 FILING DATE: 19921109 CLASSIFICATION: 435 ATTORNEY/AGENT INFORMATION: NAME: BENT, Stephen A.
Oy 274 GlnLysGluMetileGluThrLysValValLysGluGluLysAlaAsnAsp-SerAsnPr 293	194 CTTACCGTGNCGNATGCCTGGAAGCT 219 SULT 12	Oy 100 IleSerProAsnProLysCysGlyLysAsnGlyValGlyValLeuIleTrpLysValPro 119

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THESE PROTEINS,
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CGAAG 1002
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REFERENCE/DOCKET NUMBER: 1691
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202)672-5300
TELEFAX: (202)672-5399
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TELEX: 904136
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 3207 base pairs
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PatentIn Release #1.0,
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APPLICATION NUMBER: US/08/483,3
FILING DATE: 07-JUN-1995
CLASSIFICATION: 435
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APPLICATION NUMBER: US 07/946,4
FILING DATE: 09-NOV-1992
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 1, Application US/08483322
Patent No. 5760178
GENERAL INFORMATION:
APPLICANT: HERRLICH, Peter
APPLICANT: PONTA, Helmut
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MM PC compatible
STEM: PC-DOS/MS-
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MATZKU, Siegfried
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TELEPHONE: (202)672-5300
TELEFAX: (202)672-5399
TELEFAX:
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CHARACTERISTICS:
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ZIP: 20007-5109
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy di
COMPUTER: IBM PC COMP
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ADDRESSEE: Foley & 1
STREET: 3000 K Street CITY: Washington, D
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TITLE OF INVENTION:
NUMBER OF SEQUENCES:
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APPLICANT:
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AS WELL AS THEIR USE IN DIAGNOSIS AND THERAPY
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, V
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/478,882
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REGISTRATION NUMBER: 29,768
REFERENCE/DOCKET NUMBER: 16915/14
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Patent No. 5885575
GENERAL INFORMATION:
APPLICANT: HERRLICH, Peter
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3000 K Street, N.W.,
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HERRLICH, Pecc.
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Search completed: August 17, 2004, 01:24:48

Job time: 101 secs
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